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M/027/007  
DRUM MINE  
JUMBO MINING  
COMPANY

Post-It® Fax Note	7671	Date 2-22-95	# of pages ▶ 4
To Wayne Hedberg	From Jerry McFarland		
Co./Dept. DOGM	Co. BLM		
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DOGM  
MINERALS PROGRAM  
FILE COPY

M/027/007

DRAFT

**JUMBO CHEMICAL WASTE FOR IMMEDIATE REMEDIAL ACTION**DOGM  
MINERALS PROGRAM  
FILE COPY**Hazardous & Incompatible Chemicals in the Trench at the Jumbo Rubbish Dump**

Twenty foot Long by Six foot Wide by Eight foot Deep Trench at the Rubbish Dump is filled with various Sodium Cyanide, Hydrochloric Acid and Sodium Hydroxide Drums. The Trench was partially snow covered. The below referenced hazards (Poison Gas, Corrosivity and potential for Exothermic Reactions) precluded close inspection of the Trench contents without at least Level "B" PPE and back-up. Also scattered throughout the dumpsite are about twenty-five large Lead-acid batteries (at least five are cracked and leaking Sulphuric Acid and others are uncapped/corroded).

**Sodium Cyanide Drums at the Jumbo Rubbish Dump**

Eight, full, 30-gl. steel drums (dated 1989) and ten other "empty" steel drums marked Sodium Cyanide. The drums are marked with Spanish hazard warnings - possibly Mexican chemicals?? The drums are outside, on the dirt, unprotected, and mixed with various "empty" Corrosive drums (Hydrochloric Acid and Liquid Caustic Soda). Mixtures of Sodium Cyanide and Acid can form poisonous Hydrogen Cyanide gas.

**Hydrochloric Acid Drums at the Jumbo Rubbish Dump**

Approximately twenty, empty and partly empty, 55-gallon poly drums marked Hydrochloric Acid. The drums are mostly "returnable" Great Western Chemical poly drums in good shape. The drums are outside, on the dirt, unprotected, and mixed with other various "empty" Corrosive and Sodium Cyanide drums. Mixtures of Hydrochloric Acid and Sodium Cyanide can form poisonous Hydrogen Cyanide gas.

**Liquid Caustic Soda (Sodium Hydroxide) Drums at the Jumbo Rubbish Dump**

Approximately twenty, empty and partly empty, 55-gallon poly drums marked Liquid Caustic Soda. The drums are mostly "returnable" Great Western Chemical poly drums. The drums are outside, on the dirt, unprotected, and mixed with other various "empty" Corrosive and Sodium Cyanide drums. Liquid Caustic Soda absorbs moisture and when mixed with water it releases heat and becomes Corrosive.

**Lime Drums at the Edge of the Jumbo Pregnant Pond**

Cited as a hazard as far back as the July 1992 BLM report - approximately ten, corroded, fifty-five gallon, steel drums of Lime (with crystalline formations on their lids) are precariously perched on the lined lip of the "pregnant" pond.

**Sodium Cyanide Drums at the Edge of the Jumbo Pregnant Pond**

Cited as a hazard as far back as a 1992 BLM report - approximately ten, corroded, fifty-five gallon, steel drums of Sodium Cyanide (with Spanish hazard warnings on their sides) are precariously perched on the lined lip of the "pregnant" pond. A double stacked set of two Cyanide drums are leaning into the pond at a dangerous angle with nothing to stop them from toppling into the pond but a single one-inch pallet strap!

## **OTHER JUMBO PROBLEMS (continued)**

### **Chemical Holding Tanks**

Each of the three, above-ground (500 gl.?) Holding Tanks, that are sitting next to the "pregnant" and "barren" liner-ponds, show obvious signs of leakage and crystallization. My speculation is that these tanks may have held neutralizing solutions. It looks like product is still in these tanks and their associated pipings.

### **Assay Laboratory**

Another mess. Four five-gallon poly containers of various molar Sodium Cyanide solutions. Dirty lab apparatus with scales, pipettes, beakers, test tubes, etc. strewn about. Open ore bags, samples and documentation in total disarray. Numerous lab cabinets that I didn't have time or inclination to open or inventory.

### **Explosives**

We were unable to inventory or examine the on-site explosives. An armored, locked and shielded Explosives shed appeared to be appropriately grounded and secured at a remote corner of the mining operation. The huge size of the two open mining pits, the millions of tons of ore on the leach pads and the extensive network of underground shafts leads to the conclusion that significant quantities of explosive have been used, and may still be stored, on site. Since active mining operations shut down about three years ago - there is at least the potential that significant quantities of old, or out of spec, explosives are still being stored on site.

### **Topsoil Covering, Regrading, Recontouring, Reseeding**

From my document review at the State Division of Oil Gas and Mining it was apparent that the BLM and the various Mine Site Operators have haggled over topsoil covering, regrading, recontouring and reseeded issues for close to a decade. The Jumbo Mine Site is pockmarked with backhoe pits that I gather were used to estimate amounts of available topsoil for recovering and other tasks. The caretaker showed us a pitiful little revegetation test plot that was staked out in the snow.

### **SUMMARY OF LIQUID & SOLID SAMPLES (obtained at Jumbo on 2/17/95)**

- ✓ "Pregnant" Pond Water
- ✓ "Barren" Pond Water
- ✓ Run-off Water from two of the Heap Leach Pads
- M24 ✓ Water from the former "peak" Cyanide Monitoring Well Location
- M1/b ✓ Water from the former "peak" Arsenic Monitoring Well Location
- Soil from under the Two Diesel Tanks
- ✓ Discolored Soil from the Upper "Processing" Containment Area
- ✓ Soil from under the One Gasoline Tank
- ✓ Product from an Open Crate of "Cyanide-processed Steel Wool"

## OTHER JUMBO PROBLEMS

### Heap Leach Pads and the Contaminated Perched Aquifer

A scene from mining hell. Millions of tons of excavated ore, sitting on five unlined pads. Hundreds of gallons of metal-contaminated snow melt-off and leachate water continually streaming directly into the soil or through gaps in miles of broken piping into unlined berms and unlined containment areas. I pulled samples from the two monitoring wells (with water tables at 30 to 40 foot depth) that a July 1991 citation from the Bureau of Water Pollution Control identified as having respective Arsenic and Cyanide contamination levels at 200% and 300% above the threshold Maximum Contaminant Level (MCL). Analytic results from my samples may be back this week.

It is worth noting that a Sheepherder Camp is currently set-up right outside the Jumbo Mine gates. A sheep herd is now actively grazing in the vicinity of the mine properties. On-site, the Jumbo Waste Dump was criss-crossed with wild game tracks. The Mine Caretaker later regaled us with stories of using antidotes to "revive" unconscious hawks that had sipped contaminated pond water. The active well site at "Little Drum" is a 10 - 15 minute dirt-road drive from the mine entrance.

### Two - 5,000 Gi. Diesel ASTs and One - 5,000 Gi. Gasoline Underground Storage Tank

My guess is that Jumbo (or some subcontractor) excavated the two former Diesel Underground Storage tanks (USTs), painted them and re-installed them Above-ground. There is no berming or containment around the two former Diesel USTs that have been "converted" to Above-ground tanks. The nozzles and "T" fittings are leaking - as evidenced by stained soil. The fueling pad is also stained.

The one Gasoline tank has been "excavated" but left in the pit. For some reason (perhaps Jumbo tried to lift it from the pit and it fell back in??) the tank is rotated on it's side with the vent-stack sticking into the floor of the excavated dirt pit. The tank is rusty but does not appear to have rot-through. Some product or residual sludge appears to be left in the tank. There is the potential for product to leak out (through the inverted vent stack) into the soil. I doubt that Jumbo used a certified UST removal firm on any of the tank work. The chains, that are still dangling on the Gasoline tank lifting rings, and the current "position" of the "excavated" Gasoline tank leads me to believe this is a Jumbo "do-it-yourself" job. The Diesel and Gasoline Tank issues were cited as potential problems in a BLM report dated July 1990.

### Contaminated Extraction Equipment & Crates of Processed Steel Wool with Cyanide

Three Cyanide Extraction Towers and two Ovens for ore extraction are corroded, crystallized and have numerous points of leakage and spillage. The extraction equipment in the Ore Processing Facility was either improperly and/or incompletely shut down. Housekeeping is next to non-existent. High probability that further investigation could identify problems with Asbestos, Lead paint and two electric transformers with PCB's. Six, open, severely degraded, pallet crates of "scrubbed" steel wool shavings marked "Poison" or "Cyanide" are sitting out in the open with their contents either spilled or in eminent threat of release into the soil!

Hwy 50-6 THRU DELTA  
TURN ON IPP CUTOFF Rd.

TURN ON JONES RD

TURN ON 4500 N

PAST TO PAZ CAMP

BEAR TOWARDS 4<sup>th</sup> RD SIGNS (3)

STRAIGHT ~ 25-30 MILES

